Gulf of Mexico Harmful Algal Bloom Bulletin

6 January 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

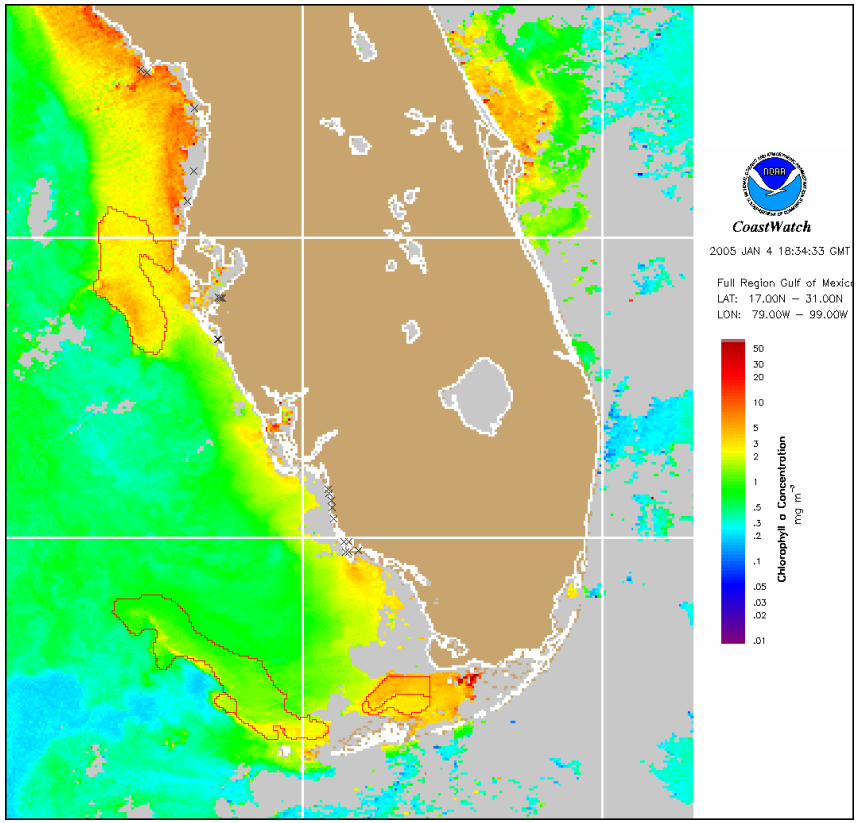
Last bulletin: January 3, 2005

Conditions: A harmful algal bloom has been identified north of the lower Keys. Water discoloration and slight to some risk of fish kills in the lower Keys is possible over the weekend. A non-harmful algal bloom has been identified alongshore near Clearwater and offshore from Clearwater to Sarasota. Reports of discolored water are possible in this region.

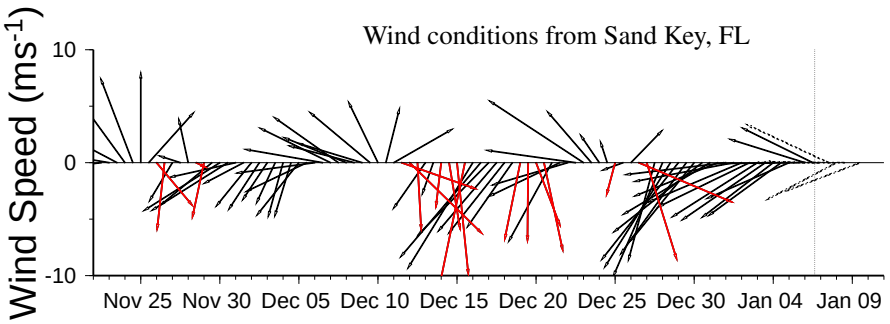
Analysis: The harmful algal bloom identified north of the lower Keys persists, but continues to dissipate. Little to no change in extent or movement has occurred over the last few days. The bloom was earlier identified as a combination of K. brevis and Rhizosolenia; current K. brevis levels are presently unknown. Chlorophyll concentrations average 2-3μg/L throughout the eastern offshore portion of the bloom. Southwest of Cape Sable, at 81°26W, 25°04N, chlorophyll tops out at approximately 9μg/L with neighboring chlorophyll levels averaging 4-6μg/L. Chlorophyll concentration up to 13μg/L in the eastern lower Keys at 81°17W, 24°47N); surrounding area averages 4-6μg/L. Cloudy conditions over the lower Keys inhibits a clear view of whether the bloom has migrated through the Keys to the Atlantic Ocean. Little movement and/or intensification of the bloom expected through Sunday.

Reports of discolored water are possible alongshore near Clearwater and offshore from Clearwater to Sarasota due to an identified non-harmful algal bloom.

~Fisher, Bronder

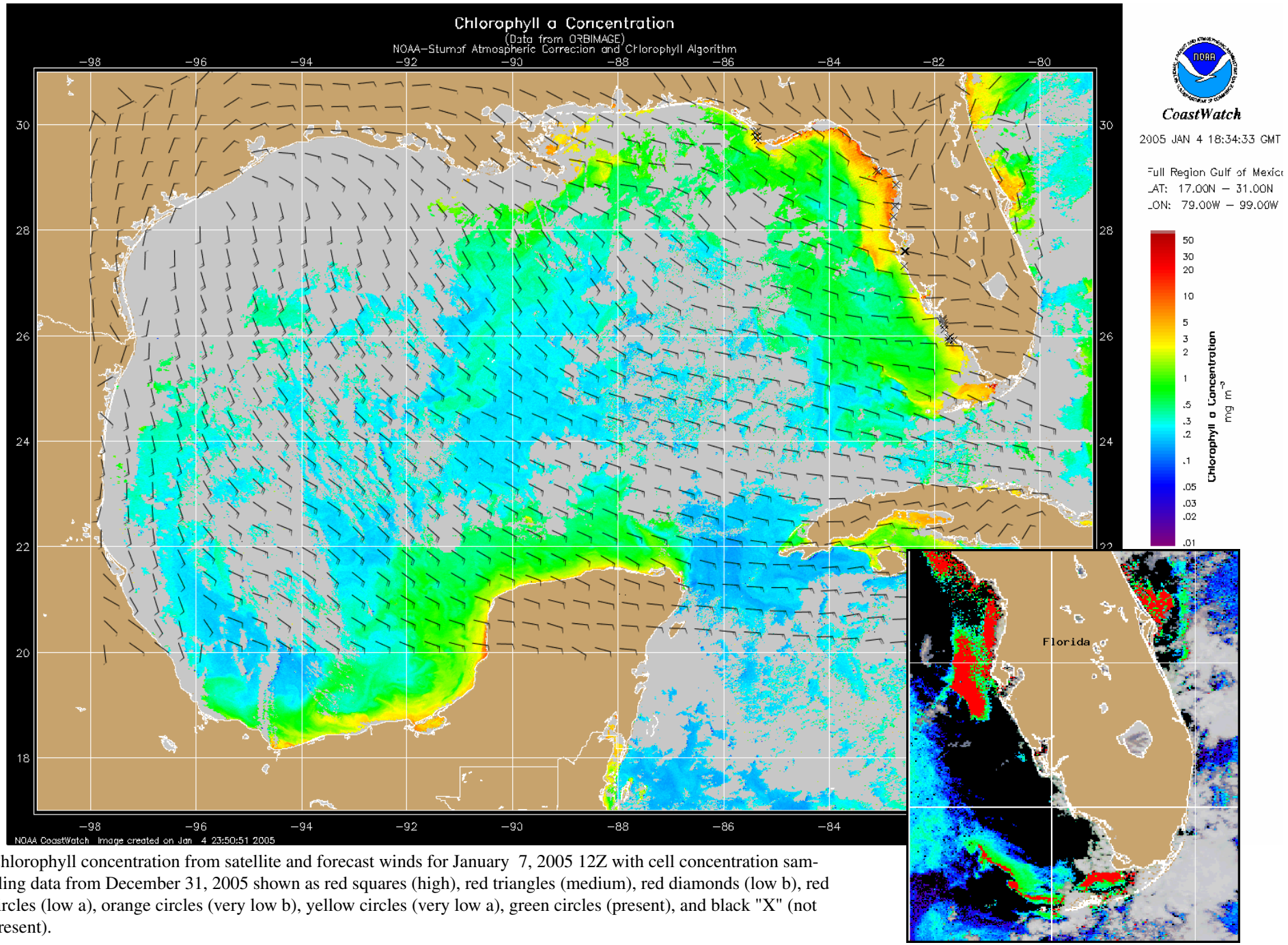


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 31, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Winds (5-10 knots, 2-5 m/s) today through Saturday expected to vary between easterly and southeasterly, becoming northeasterly on Sunday.



Chlorophyll concentration from satellite and forecast winds for January 7, 2005 12Z with cell concentration sampling data from December 31, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)